Status of the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) A scanning optical device used in a system configured to capture image data representing biometric data, comprising:

an optical device;

means for rotating; and

a detection device,

wherein the optical device directs light that has totally internally reflected from an inside surface of a non-planar prism in the system onto the detection device, while the rotating means rotates at least one of the optical device and the detecting device during detection of the light, and

wherein the image data of a print surface of up to substantially all of a person's hand is captured while the hand is stationary on the optical device.

2. (Original) The scanning optical device of claim 1, wherein the rotating means rotates at least one of the optical device and the detecting device around an axis of symmetry of the non-planar prism to scan an entire surface area of the inside surface of the non-planar prism.

3. (Original) The scanning optical device of claim 1, wherein the rotating means comprises:

a motor; and

a belt and pulley system coupled to the optical device and the detection device, wherein when the motor operates the belt and pulley system is configured to rotate the imaging optics and the detection device about an axis of symmetry of the non-planar prism to scan an entire surface area of the inside surface of the non-planar prism.

4. (Original) The scanning optical device of claim 1, wherein the rotating means comprises:

a rotating optical element coupled to a motor, such that the rotating optical element rotates about an axis of symmetry of the system.

5. (Original) The scanning optical device of claim 1, wherein the rotating means is configured to generate images having a resolution of about 1000 dots per inch.

6. (Original) The scanning optical device of claim 1, wherein the rotating means is configured to generate images having a resolution of about 500 dots per inch.

7. (Original) The scanning optical device of claim 1, wherein the rotating means is configured to generate images having a resolution of about 500 dots per inch to about 1000 dots per inch.

8. (Original) The scanning optical device of claim 3, wherein the rotating optical element includes a dove prism.

9. (Original) The scanning optical device of claim 3, wherein the rotating optical element includes a Pachan prism.

10. (Original) The scanning optical device of claim 1, wherein the rotating means comprises one of a belt and pulley system, a electromagnetic system, a resilient device system, or a stepper motor.

11. (Original) The scanning optical device of claim 1, wherein the rotating means moves along an arcuate path to capture radial scan line images transmitted through a base of the non-planar prism.

12. (New) A system including a scanning optical device, the scanning optical device comprising:

a directing device;

means for rotating; and

a detection device,

wherein the directing device directs light that has totally internally reflected from an inside surface of a conical prism in the system onto the detection device, while the rotating means rotates at least one of the directing device and the detecting device during detection of the light.

13. (New) A scanning optical device used in a system that captures up to substantially all of a print surface of a hand while the hand remains stationary, comprising:

a directing device;

rotating device; and

a detection device,

wherein the directing device directs light that has totally internally reflected from an inside surface of a non-planar prism in the system onto the detection device, while the rotating device rotates at least one of the directing device and the detecting device during detection of the light.

14. (New) The scanning optical device of claim 13, wherein a contact surface of the non-planar prism is shaped to allow the capturing of the up to substantially all of the print surface of the hand, while the hand remains stationary on the non-planar prism.